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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,910	08/20/2003	Sameh Guirgis		4757
7590 06/15/2004			EXAMINER	
Sameh Guirgis 4259 Tumbleweed Cresent Windsor, ON N9G389 CANADA			CHOI, STEPHEN	
			ART UNIT	PAPER NUMBER
			3724	

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/643,910	<b>Applicant(s)</b> GUIRGIS, SAMEH	
	<b>Examiner</b> Stephen Choi	<b>Art Unit</b> 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.                                                |

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I. Claims 2 and 6 are, drawn to a process requiring the frequency of the harmonic force being substantially the same as a selected natural frequency of a structural system, classified in class 29, subclass 888.091.

Group II. Claims 3 and 7 are, drawn to a process requiring steps of applying a pre-stressing, classified in class 29, subclass 888.09.

Group III. Claims 4, 8, and 11 are, drawn to a process requiring steps of applying the harmonic force in a direction substantially perpendicular to a predetermined fracture plane, classified in class 225, subclass 2.

Group IV. Claim 10 is, drawn to a process requiring steps of applying a pre-stressing, classified in class 29, subclass 888.09.

Group V. Claims 13 and 19 are, drawn to a process requiring steps of applying a load comprising a mean load having a mean load value and oscillating the load magnitude about the mean value by a load amplitude, classified in class 29, subclass 417.

Group VI. Claims 14-15 and 20 are, drawn to a process requiring steps of applying a dynamic force during a time period centered on a time

Art Unit: 3724

instant at which a deformed shape is the closest to its original shape, classified in class 29, subclass 412.

Group VII. Claims 16-17 and 20 are, drawn to a process requiring steps of applying a dynamic force during a time period centered on a time instant at which the stress intensity factor corresponding to the load has a maximum value, classified in class 29, subclass 414.

Claims 1 and 5 will be examined if any of groups I and II are elected.

Claims 1,5, and 9 will be examine if group III is elected.

Claims 9, 12, and 18 will be examined if any of groups IV-VII are elected.

2. Claims 1 and 5 link inventions of groups I and II and claims 9, 12, and 18 link inventions of groups IV-VII. The restriction requirement of the linked inventions is subject to the nonallowance of the linking claim(s), claims 1, 5, 9, 12, and 18. Upon the allowance of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Art Unit: 3724

3. Inventions of groups I-VII are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. For example, the process of group I does not require the steps of applying a pre-stressing set forth in group II, and conversely, the process of group II does not require the frequency of the harmonic force being substantially the same as a selected natural frequency of a structural system set forth in group I, the process of group I does not require steps of applying the harmonic force in a direction substantially perpendicular to a predetermined fracture plane set forth in group III, and conversely, the process of group III does not require the frequency of the harmonic force being substantially the same as a selected natural frequency of a structural system set forth in group I. See MPEP § 806.05(d).

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Choi whose telephone number is 703-306-4523. The examiner can normally be reached on Monday-Friday 9:00-3:30.

Art Unit: 3724

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on 703-308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sc  
09 June 2004

  
**STEPHEN CHOI**  
**PRIMARY EXAMINER**